

CLAIMS

1. A system for computer-aided intravenous delivery of anesthetics and/or other drugs to a patient,
5 wherein said system comprises:
- an Infusion Controller that delivers an amount of drug(s) to a patient;
- possibly a DataLogger Controller with one or more Sensors adapted so as to be coupled to a patient and to generate
10 signals reflecting one or more health conditions or statuses of the patient;
- a Communication Controller connected with the infusion pumps and/or monitors;
- a Session Controller arranged to carry out the modeling of
15 anesthesia procedures and arranged to run a first procedure and to dynamically adapt said first procedure and/or select and run a second procedure based upon one or more of said sensors' output and/or observation from a physician;
- 20 a Graphic User Interface to display different views of the system and to accept user input;
- a set of interfaces used to link the Infusion, Datalogger and Session Controllers to views displayed by the Graphical User Interface;
- 25 a Processor or Infusion Session Manager that integrates the Graphic User Interface, the Infusion Controller, the DataLogger Controller, the Communication Controller and the Session Controller and that steers drug delivery, wherein the system contains a set of configurable written
30 procedures to steer intravenous anesthetic drug delivery and/or

other drug delivery, whereby said procedures have been adapted to the type of surgical action and/or therapy, adapted to the patient's physical condition, and adapted to the type of drugs, tools and theoretical models used.

5 2. The system according to claim 1 further comprising an Archiving Manager which is in contact with the Infusion Session Manager and is under the control of the same program as the Infusion Session Manager.

10 3. The system according to claims 1 or 2 wherein the Archiving Manager and the Infusion Session Manager may be independently transportable units.

15 4. The system according to any of the preceding claims, wherein the person in charge or the user may set the level of assistance desired via a graphical user interface.

15 5. The system according to any of the preceding claims, wherein only an expert user is allowed to edit and/or make permanent changes to the procedures.

20 6. The system according to any of the preceding claims, wherein the trigger to launch or change a running procedure comes from an internal state and/or from an externally received command or request.

25 7. The system according to any of the preceding claims, wherein the procedures contain tasks and/or commands per major event, phase or step in said surgery and/or therapy.

25 8. The system according to any of the preceding claims, wherein the Infusion Controller administers at least one intravenous drug selected from the list consisting of hypnotics, analgesics, amnesics and other drugs.

9. The system according to claim 8, wherein said hypnotic is propofol and/or said analgesic is remifentanil and/or said amnesic is mivacurium.

10. The system according to claim 9, wherein the drug state model for propofol is that of Schnider and the drug state model for remifentanil that of Minto.
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11. The system according to claim 8, wherein said other drug may be any drug that is used in cancer therapy, possibly applied in combination with antibiotics.

10 12. The system according to claim 8, wherein said other drug may be selected from the list consisting of paralyzing agents, vasodepressors and pressor substances.

15 13. The system according to any of the preceding claims, containing constraints and/or safety measures that dictate that a minimal amount of time has to pass between two subsequent modifications to a procedure.

20 14. The system according to any of the preceding claims, wherein the reliability of a signal or parameter is determined by the quality of said signal, by its relation with other related signals or parameters and/or by the deviation from a normal value and/or from a safe range.

15. The use of a system according to any of the preceding claims in intravenous anesthesia and/or cancer therapy.